

ACTIVITIES ORGANISED BY DEPARTMENT OF PHYSICS

2022-23







Report of "Poster Making Competition" Poster Making Competition Title: 15th August 2022 Date and year: Physics Laboratory Venue: Department of Physics in association with the Physics Club (Sherlock Ohms) Organising Committee 27 No. of **Participants** The objective of this event was to create a poster to depict views on **Objective:** Important scientific breakthroughs by Indian Physicist History of Indian Freedom Fighters The Department of Physics and Physics Club 'Sherlock Ohms' in association with Summary and proceedings Directorate of Higher Education, Goa organized a poster competition on "Important scientific breakthroughs by Indian Physicist" and the "History of Indian Freedom Fighters". This competition was on 15th August 2022 from 10:30 am to 12:30 pm in the Physics Laboratory. The participants had to select any one of the given topics for their poster. They had to form a group of three and prepare the poster on campus within the given duration of two hours. The judges of this competition were Dr. G. K. Naik, Department of Chemistry and Dr. Sanjay Gaikwad, Department of Geography, Parvatibai Chowgule College of Arts and Science. Students from the Physics, Computer Science and Biochemistry Departments participated in this event.





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Report of "Talk on Motivation and Leadership: Perspective of an Air Warrior"		
Title:	Talk on Motivation and Leadership: Perspective of an Air Warrior	
Date and year:	14 th August 2022	
Venue:	Online	
Resource person/s:	Sqn. Ldr. Ishan Mishra, Indian Air Force	
Organising Committee	Department of Physics in association with Department of Geology, Department of Mathematics and Physics Club (Sherlock Ohms)	
No. of Participants	95	
Objective:	The objective of this event was to increase awareness among students regarding the challenges, excitement and adventures in the life of an Airforce Warrior.	
Summary and proceedings	The Department of Physics, Department of Geology, Department of Mathematics, Physics Club 'Sherlock Ohms' in association with Directorate of Higher Education, Goa organized an online talk on "Motivation and Leadership: Perspective of an Airforce Warrior". The talk was on 14 th August 2022 from 11:30 am to 12:30 pm The resource person for the talk was Sqn. Ldr. Ishan Mishra, Indian Airforce. The talk began with introducing students to the Motto of the Indian Airforce. Next the speaker discussed about the leadership traits that the IAF Air Warriors possess. He concluded the talk by sharing his experience on challenges and obstacles he overcame as an Airforce Warrior. The talk greatly inspired the students and faculty of our college. Students and Faculty from the Physics, Geology and Mathematics Departments participated in this event.	





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Report of "Field Trip"		
Title:	Field Trip	
Date and year:	14 th October 2022	
Venue:	Indian Naval Aviation Museum & Goa State Museum	
Organising Committee	Department of Physics in association with the Physics Club (Sherlock Ohms)	
No. of Participants	32	
Objective:	The objective of this trip was to help students gather knowledge about the rich history and legacy of Indian Naval Aviation, throwing light on the ancient historical and cultural traditions of Goa.	
Summary and proceedings	Department of Physics in association with the Physics Club (Sherlock Ohms) organized a field trip for the physics students. The students along with the staff visited Indian Naval Aviation Museum, Vasco & Goa State Museum, Panaji on 14 th October 2022 from 9:00 am to 5:00 pm. The trip began with lot of enthusiasm and vigour. Firstly, we visited the Indian Naval Aviation Museum. The Museum displays a number of aircrafts that were used by the Indian Navy throughout its history. Secondly, at around 12:30 we left for the Goa State Museum. The Museum had a display of many statues and articles relevant to Ancient History, Archaeology and Geology. The trip ended by a visit to Mall De Goa.	





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Report of "Molywood to molecular nodes workshop "		
Title:	Molywood to molecular nodes workshop	
Date and year:	8 th to 11 th September 2022	
Venue:	Online workshop	
Organising Committee	Department of Physics in association with the Physics Club (Sherlock Ohms)	
No. of Participants	13	
Objective:	The objective of this workshop was to introduce students to Linux OS, shell scripting, to make Molywood molecular dynamics movies and to make scientific illustrations using the blender software.	
Summary and proceedings	The Molywood to molecular nodes workshop was held online from 8 th to 11 th September 2022 which was organized by Gdansk University of technology, Poland, IRB Barcelona, Spain and Scidart Academy India. In this workshop students were introduced to Linux OS, shell scripting, to make Molywood molecular dynamics movies and were taught to make scientific illustrations using the blender software.	





Report of "Workshop on Deep Learning and its application using a supercomputer" Title: Deep Learning and its application using a supercomputer 17th January 2023 Date and year: Upper Auditorium Venue: Dr. Rajendra Adhikari, Department of Physics, Kathmandu University, Nepal Resource person/s: Department of Physics in association with Sherlock Ohms Club Organising Committee 49 No. of **Participants** The objective of this workshop was to help students gather knowledge on Deep learning **Objective:** and its application using a Supercomputer, to help them to get access to supercomputers. The Department of Physics in association with the Sherlock Ohms Club organised a Summary and workshop on "Deep Learning and its application using a supercomputer". The proceedings Workshop was on 17th January 2023 from 10:00 am to 5:00 pm. The resource person for the talk was Dr. Rajendra Adhikari, Department Of Physics, Kathmandu University, Nepal. The workshop began with the introduction to deep learning and how it is connected to the neural system of human beings. Participants were introduced to the machine learning model and how to train and test the model using python programming language. The various python libraries like pandas, matplotlib, numpy and seaborn were also taught. In the afternoon session the hands on training to these concepts was given and were instructed to login through supercomputer. Students and Faculty from the Physics, Geology and Chemistry Departments participated in this event.

Photographs







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Report of "Subject Talks by Alumni on Astrophysics and Introduction to Quantum Computing"			
Title:	Subject Talks by Alumni on Astrophysics and Introduction to Quantum Computing		
Date and year:	7 th January 2023		
Venue:	Lower Auditorium		
Resource person/s:	Mr. Sidharth Nath from Christ University Mr. Nikhil Mesquita from IIT Palakkad		
Organising Committee	Department of Physics in association with Sherlock Ohms Club		
No. of Participants	21		
Objective:	The objective of this event was to introduce the participants to the various aspects of observational astronomy, the Xray binaries, spectral analysis and to introduce the concepts of Quantum computing.		
Summary and proceedings	The Department of Physics, in association with the Sherlock Ohms Club organized subject talks on "Astrophysics and Introduction to Quantum Computing". The talk was on 7 th January 2023 from 2:15 pm to 4:15 pm. The Alumni for the talk were Mr. Sidharth Nath from Christ University and Mr. Nikhil Mesquita from IIT Palakkad. The talk began by introducing the Alumni and by giving them the token of appreciation. Mr. Sidharth Nath introduced the participants to the various aspects of observational astronomy, the Xray binaries and their spectral analysis. It was a part of his research project that was carried out at Christ University with the help of the satellite Astrosat. Mr. Nikhil Mesquita introduced the concepts of Quantum computing and how quantum computers can be replaced by classical computers in recent times. He also explained about the different algorithms in quantum computing. After the talk both the Alumni had a discussion with students regarding career options in Physics. Students and Faculty from the Physics Department participated in this event.		

Photograph







REPORT ON CAMPUS ACTIVITY

(Seminar / Webinar / Expert talk / Workshop / Visit to Incubators on the themes pertaining to Innovation/Entrepreneurship/Intellectual property)

	Joy of Learning Science through
Title of the event	Experiments
Date and time	7 th February 2023 from 11:00 am – 2:00 pm
Mode	Offline
Organising Department/School/Directorate/ Section	Department of Physics, Parvatibai Chowgule College of Arts and Science
Resource Person/s	Mr. Bhagwan Dattatreya Chakradeo, Associate Professor (retd), Smt. C.H.M College, Ulhasnagar
Participants in house	Faculty:06, Students: 26, Others:
Participants (External)	Faculty: 2, Students: 24, Others:
Faculty attended	08
Students attended	50
Total Participants	58
The objectives and description of the activity	Objectives: The objective of this workshop was to explain student's scientific concepts and principles by showing several scientific demonstrations. Description: The Department of Physics in association with the Sherlock Ohms Club organised a workshop on "Joy of Learning Science through Experiments". The Workshop was held on 7 th February 2023 from 11:00 am to 2:00 pm. The resource person for the talk was Mr. Bhagwan Dattatreya Chakradeo, Associate Professor (retd), Smt. C.H.M College, Ulhasnagar. The workshop began with the introduction of the Resource Person followed by a

	memento presented to the speaker. Participants were introduced to various innovative and fascinating experiments, like Newton's Cradle, Bernoulli Principal, TIROSCOPE, Centre of mass of a hammer, Shock machine, which helped them to analyse and gain knowledge of the tools used in daily life. Students and Faculty from Multipurpose Higher Secondary School, Borda, Chandrabhaga Tukoba Naik Higher Secondary School and the Physics department of Parvatibai Chowgule College of Arts and Science Participated in this workshop.
Attach copy of the Flyer event (if any)	
URL of the event (if any)	
Social Media posts and links: (if any)	
Instagram link	
Facebook link	
Youtube link	
Photos (minimum 5, geo-tagged)	
Feedback	
Benefit/Key outcome of the event in terms of learning/skills/knowledge	These Scientific demonstration's helped the students to visualize and understand the complex scientific concepts. It also helped the students to observe carefully and analyse what they see. They learnt to identify patterns, make predictions, and draw conclusions based on their observations. This workshop was an effective way to engage students, promote learning, and foster an interest in science.

GPS Map Camera



Margao, Goa, India 7XRJ+63G, parvatibai Chowgule College of Arts and Science (Autonomous), Margao, Goa 403601, India Lat 15.289559° Long 73.980507° 07/02/23 01:39 PM GMT +05:30



GPS Map Camera



Margao, Goa, India 7XRJ+63G, parvatibai Chowgule College of Arts and Science (Autonomous), Margao, Goa 403601, India Lat 15.289559° Long 73.980507° 07/02/23 12:42 PM GMT +05:30